

Georgia State University ScholarWorks @ Georgia State University

Psychology Faculty Publications

Department of Psychology

1994

Proposed guidelines and criteria for describing samples of persons with learning disabilities

Robin Morris

Georgia State University, robinmorris@gsu.edu

G. Reid Lyon

The National Institute of Child Health and Human Development, Reading4all@tx.rr.com

Duane Alexander

The National Institute of Child Health and Human Development, duane.alexander@nih.gov

David Gray

The National Institute of Child Health and Human Development, graydb@wusm.wustl.edu

James Kavanagh

The National Institute of Child Health and Human Development

Follow this and additional works at: https://scholarworks.gsu.edu/psych_facpub

 Part of the [Psychology Commons](#)

Recommended Citation

Morris, R., Lyon, G.R., Alexander, D., Gray, D.B., Kavanagh, J., Rourke, B.P. & Swanson, H.L. (1994). Proposed guidelines and criteria for describing samples of persons with learning disabilities. *Learning Disability Quarterly*, 17:2, 106-109.

This Article is brought to you for free and open access by the Department of Psychology at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Psychology Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

EDITORIAL

: PROPOSED GUIDELINES AND CRITERIA FOR DESCRIBING SAMPLES OF PERSONS WITH LEARNING DISABILITIES

**Robin Morris, G. Reid Lyon, Duane Alexander, David B. Gray,
James Kavanagh, Byron P. Rourke, and H. Lee Swanson**

ROBIN MORRIS, Ph.D., Georgia State University.

G. REID LYON, Ph.D., DUANE ALEXANDER, Ph.D., DAVID B. GRAY, Ph.D., JAMES KAVANAGH, Ph.D., The National Institute of Child Health and Human Development.

BYRON P. ROURKE, Ph.D., University of Windsor.

H. LEE SWANSON, Ph.D., University of California-Riverside.

The field of learning disabilities has grown since its recognition as a handicapping condition in 1968 to represent almost one-half of the children receiving special education services in the United States. At the same time, learning disability remains one of the least understood, yet most debated disabling conditions that affect children and adults. The persistent confusion regarding learning disabilities is due, in large part, to the ambiguous way in which the category is defined. Unfortunately, such ambiguity results in tremendous differences in how educational and clinical professionals identify children who manifest learning disabilities.

In addition, confusion about the nature and needs of individuals with learning disabilities is exacerbated in the research arena because many researchers select their samples by simply drawing from classes of children with learning disabilities identified by school district procedures. As is now well known, these samples are biased in unknown ways because most selection procedures are influenced not only by objective test results, but by political and social factors operating within a given school district. In fact, it is more the rule than the exception that, because of inconsistent identification procedures and criteria, a child can literally be "cured" of a learning disability simply by moving across state lines or even by changing schools within the same community. Clearly, when research samples are taken from such sites, the variability inherent in sample characteristics prohibits replication and generalization of findings. This, in turn, constitutes a severe impediment to the development of any clinical science.

In an effort to address this problem with members of the research community, the National Institute of Child Health and Human Development (NICHD) within the National Institutes of Health (NIH) sponsored a working conference with a number of journal editors to discuss the drafting of a position paper to delineate criteria for the description of subjects within samples of persons with learning disabilities. Within this context, scientists from NICHD (Duane Alexander, Reid Lyon, David Gray, and James Kavanagh) met with editorial representatives from the Journal of Clinical and Experimental Neuropsychology (Robin Morris), the Journal of Learning Disabilities (Judy Voress), the Learning Disability Quarterly (Lee Swanson), Exceptional Children (Naomi Zigmond), The Clinical Neuropsychologist (Byron Rourke), and the American Speech, Language, and Hearing Association (Tanya Gallagher). Editors from other major journals publishing research in the area of learning disabilities were also invited but could not attend.

On the basis of the discussion during this conference, a set of suggested guidelines were outlined for possible use by journal editors when reviewing studies involving research with persons with learning disabilities. Each journal editor was asked to review the guidelines and criteria with their editorial staff and their consulting editors and to provide NICHD with relevant feedback. It should also be pointed out that the NICHD has adopted the Basic Criteria delineated in this article when reviewing grant applications involving persons with learning disabilities. A rationale for

improving descriptions of sample characteristics and the suggested guidelines are provided in the following sections.

A RATIONALE FOR IMPROVING THE DESCRIPTION OF SAMPLES OF PERSONS WITH LD

One of the most basic activities of science is to define the object of interest and study. Diagnostic labels such as learning disabled represent a category of persons who have been of significant interest to a wide variety of disciplines. In the best of all scientific worlds, the term learning disabled should carry with it a very specific communication and scientific value as it would clearly define these attributes of the person that set him or her apart from other groups of persons who are not learning disabled. Unfortunately, as the field of learning disabilities has expanded, so have the boundaries of definition. Therefore, the term learning disabled has come to mean many different things to many different groups who are invested in it for a multitude of sociopolitical as well as scientific reasons. Consequently, the term has lost much of its communicative value and scientific rigor.

To assist in reversing this process, we need to become more specific in our research and communicative use of the term learning disabled. Given the absence of a widely accepted or validated definition, there is also a need to allow for a broad array of possibilities for its use until better scientific data are available to allow for a more restrictive implementation. Further, all authors must be more sensitive about research procedures for describing their subjects and populations.

In the past, authors have frequently described such children as "meeting local school criteria for learning disability services" or "children who were referred to the learning disability clinic of a local university." Obtaining additional information about each child's characteristics can be problematic due to confidentiality issues. Unfortunately, however, such descriptions are completely inadequate for either communicative or scientific purposes. As mentioned in the introduction, this is mostly because each school system uses different procedures and guidelines to identify such children, and the act of referral does not mean that any person actually has such a learning disability.

SUGGESTED GUIDELINES AND CRITERIA

To help improve the communicative and scientific use of the term learning disabled, the following criteria and guidelines will be used when reviewing all manuscripts focused on persons with learning disabilities for discussion of criteria (also see Rosenberg et al., 1992). The criteria are ordered in terms of increasing scientific sophistication and specificity in their descriptions, which should lead to increasingly more useful research and communicative terminology. The assumption underlying these guidelines is that descriptions of subjects with learning disabilities that allow clear cross-study comparisons or specific replication represent basic and essential attributes of good communication and/or science. These guidelines neither specify what a learning disability is, nor do they restrict authors from using the definitions of their choice. However, they do require authors to provide specific and descriptive information about the subjects whom they call learning disabled, so that others can be better informed. In this manner the term will at least be defined clearly for a specific purpose.

Minimal Criteria

If studies use subjects who have been predefined via another process (i.e., school district psychologists), and there is no access to such assessment results, then at minimum, the authors should provide clear descriptions of what the selection processes are and define the guidelines for inclusion. As an example, we suggest the following: "All elementary-school children met local district criteria for a specific learning disability in reading. Learning disability in reading is defined in standardized guidelines as representing a discrepancy of 22 standardized points ($M=100$, $SD=15$) between a Full Scale IQ score (using WISC-R or Stanford-Binet) and at least 2 standardized administered tests of word identification and passage comprehension (Woodcock-Johnson, PIAT). The children also have to demonstrate an area of specific cognitive deficit (phonemic awareness, verbal memory, etc.) related to their reading deficit. This cognitive deficit should also be defined by standardized, individually administered tests."

In addition, other inclusionary or exclusionary criteria used to select the sample should be clearly described. The more operationally the criteria can be described, the better. For example, it is better to state that "all children were rated on the Achenbach Child Behavior Checklist by their teachers and

any child who had a Tscore above 70 on the hyperactivity scale was not included" than to say that "hyperactive children were not included."

Also, the more details that are available about the subject group studied, the better. At a minimum, basic demographic information on the sample has to be provided. This must include such information as sex, age, grade level, length of time in special education services, race, and socioeconomic makeup (which may have to be estimated using other information such as child's zip code in relation to census data regarding socioeconomic status, etc.).

The sample's mean, mode, and median results (and SDs) on group achievement tests or other group-based data are always useful because they allow others to compare the current sample with other samples. Without such information there is no way to compare similarities and differences between studies and results.

Basic Criteria

In addition to the minimal criteria described above, the basic level of specificity requires greater detail when describing the nature of the sample as a whole. The following information should be gathered: gender, age, grade level, length of time in special education placement, type of special education placement, race, SES, IQ, and specific achievement test results. Each standardized test should be clearly identified, and an increased attempt should be made to provide information about the subjects' academic functioning outside the areas of deficit.

For example, it is common for authors to assess oral reading ability to identify a child with such a deficit, but rarely do they provide information about the child's mechanical arithmetic abilities. Clearly, some children may have both problems, while others do not. The more specific the sample, and the more specific the theoretical question, the more description is needed to better define the subject sample.

Consequently, authors should provide their definition of what a child with learning disabilities is and provide very specific details regarding how the subjects were selected for inclusion in the study as well as relevant exclusionary criteria. If control or contrast groups are involved, details should relate how these groups were selected and similar demographic data and test results should be provided. Unfortunately, sample means and standard deviations do not allow for easy study replication, as it is very difficult to gather another sample with similar average characteristics.

Peak Criteria

Scientifically, the most useful studies in any area are those that allow for complete replication in another laboratory, site, or sample. To make this possible, researchers have to provide clearly documented and operationalized definitions for their subject selection criteria. In addition, studies typically should apply such subject selection criteria in an a priori manner. Criteria for control groups should also be delineated in an a priori manner. This emphasis on a priori identification of selection criteria is intended to enhance careful replication efforts.

In reports using peak criteria, authors should provide detailed information about the specific tests and measures they used, the specific scores they used for decision purposes, any exclusionary criteria involved, and the number of subjects meeting these a priori criteria who were identified within their initial sample. In addition, details on who evaluated the child and their qualifications should be included. Finally, authors should provide the same basic demographic and standardized test results information and group summary data as described for Basic Criteria.

SUMMARY

None of the criteria discussed above specifies the definitions to be used or what research questions are important. The purpose of suggesting these guidelines and criteria is simply to help improve the communicative and scientific uses of the term learning disabled. Regardless of the criteria used, the guidelines will allow for greater possibility of study-to-study comparisons and actual replications. This will allow the field of learning disabilities to become more clearly focused on its most basic activity-to better define and understand this unique and special object of interest and study.

REFERENCES

- Rosenberg, M., Bott, D., Majsterek, D., Chiang, B., Simmons, D., Gartland, D., Wesson, C., Graham, S., Smith Myles, B., Miller, M., Swanson, H.L., Bender, W., Rivera, D., & Wilson, R. (1992). Minimum standards for the description of participants in learning disabilities research. *Learning Disability Quarterly*, 15, 65-70.